

Appln. No. 09/228,710
Amdt. dated February 1, 2005
Reply to Office Action of August 26, 2004

PATENT

REMARKS/ARGUMENTS

Claims 1-28 were pending and was variously rejected under 35 U.S.C. §103 as obvious over U.S. Patent No. 6,154,465 to Pickett or Pickett in view of U.S. Patent No. 4,406,004 to Hall *et al.* (hereafter Hall) and further in view of Alderman U.S. Patent 4,578,542. Claims 3, 8, 12-14, 16, 21, 24 and 26 were canceled for sake of compactness in prosecution without prejudice. Claims 1-2, 4-7, 9-11, 15, 17-20, 22-23, 25, and 27-28 are thus pending. In light of the amendments and the following remarks, the undersigned requests withdrawal of the rejections.

I. The Present Invention

As was discussed previously, the present invention relates to a telephone communications interface for a computer that provides selected electrical signals to attached telephones.

As illustrated in the patent specification, in Fig. 7 a ringer drive circuit 300 is configured in one embodiment to provide ringing signals to telephones 940-960 at different times. More specifically, the ringer drive circuit 300 provides ringing signals to a first telephone line, step 840, then to a second telephone line, step 850, then to a third telephone line, step 860 in the embodiment in Fig. 6.

It is noted that in the embodiment disclosed in the patent specification, in Fig. 2, telephones 260 are connected by separate telephone lines 250 to server 70. Further, as seen, two telephones 260 are not connected to a common telephone line. Accordingly, the ringer drive circuit 300, above, can supply ringing signals independently to each telephone in these embodiments. Further, the same ringing signals are not applied to more than one telephone in these embodiments.

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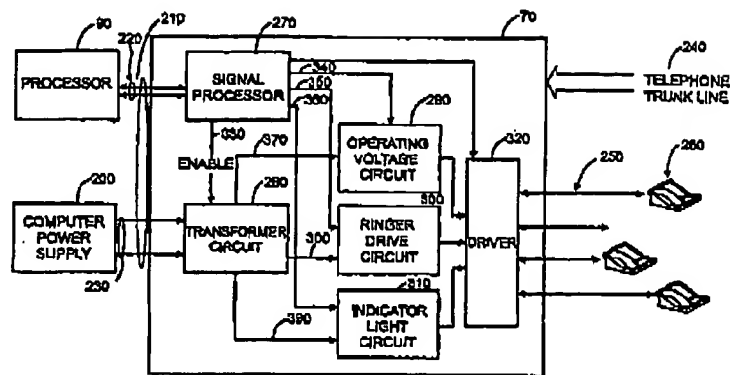


FIG. 2

The pending claims now include language directed to these feature. As an example, claim 1, now recites in part, generating a ringing signal in response to the ringer power and to the secondary voltage, wherein a peak voltage of the ringing signal is provided to no more than approximately one half of the maximum number of telephones at a time, and wherein none of the plurality of telephones are on a common line.

Additionally, claim 2 recites, generating an indicator light signal in response to the primary voltage, wherein a peak voltage of the indicator light signal is provided to no more than approximately a half of the maximum number of telephones at a time.

II. The Cited References

A. Pickett

Pickett was previously discussed. The Examiner agreed that Pickett did not disclose ringing less than all the telephones at a time or that all of the telephones are on separate circuits (Office Action at page 3).

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B. Hall

As also previously discussed, Hall appears to disclose generating a ringing signal for use on party lines. As is known, with party lines, multiple telephones are coupled to the same telephone line, thus they are called "party lines."

Hall discloses that ONE ringing signal is supplied simultaneously to EACH telephone on the party line. Specifically, the "ring generator serves all the line cards which are coupled to all the telephone lines in the system." (col. 21, lines 44-45). However, not all phones ring at the same time in response to the ONE ringing signal. Hall discloses that this is because each telephone on the party line (or multiple party lines if there are multiple line cards), is different, and each telephone is responsive to different parts of the ONE ringing signal. For example, Hall describes that each telephone on the party line is responsive to either 1) the different polarity/line combination or 2) the different ringing frequency. Again, the ONE common ringing signal is supplied to EACH telephone simultaneously, however, only a subset of the telephones actually ring. Specifically, Hall discloses two types of party lines:

1) Bell System Party Lines

On Bell System party lines, each telephone on the party line is "responsive to a different type ringing signal". That is, one phone may be made responsive to a ring signal having a first characteristic such as a 20-hertz ringing signal superimposed upon a positive 48-volt DC level on the tip line. A second phone may be made responsive to a ring signal having a second characteristic such as a twenty-hertz tone superimposed upon a negative 48-volt DC signal on the tip line. A third phone may be made responsive to a twenty-hertz ringing signal superimposed on a positive 48-volt DC signal on the ring line. Finally, the fourth phone may be made responsive to a twenty-hertz ringing signal superimposed on a negative 48-volt DC signal imposed upon the ring line." (col. 20, lines 38-50, emphasis added). Thus, for example, in order to ring a particular phone, "a twenty-hertz [sic] ringing signal is superimposed upon a 48-volt positive DC level imposed upon the tip line," causing "only the telephone which is responsive to the

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positive 48-volt DC level on the tip line" to ring. (col. 21, lines 25-27, 31-32, emphasis added).

2) Independent Telephone Company Party Lines

"A different ringing scheme is utilized by the independent telephone companies for party lines in that the independents use different frequencies. That is, up to five phones may be simultaneously connected to a particular party line. Each phone on the line may be made responsive to a ringing signal of a different frequency, such as by a band pass filter." (Col. 20, lines 51-57, emphasis added).

C. Alderman

Alderman discloses a line powered flashing circuit. From Alderman, the previous Examiner cited Alderman col. 5, lines 19-28:

Of course other flash repetition rates may be used ... it should be understood that the selection of the flash repetition rate is limited by ... (b) the rate at which the energy available in the ringing signal can charge the storage capacitor with sufficient energy to provide an adequate light output.

As can be seen, this section makes no reference to applying power for flashing circuits discriminately between telephones. It simply acknowledges a problem that the amount of power available is limited, so the flashing frequency is limited. Alderman makes no reference at all to a possible solution.

II. The Cited References Distinguished

A. Claim 1

Claim 1 is not taught, disclosed or suggested by Pickett in view of Hall.

Specifically, Claim 1 recites generating a ringing signal in response to the ringer power and to the secondary voltage, wherein a peak voltage of the ringing signal is provided to no more than approximately one half of the maximum number of telephones at a time, and wherein none of the plurality of telephones are on a common line.

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In contrast to claim 1, the party lines operated under both the Bell System and the independent telephone company structure, the telephones on a party line are coupled to a common line. Further, ONE ringing signal is applied to all the telephones on the party line at the same time. Thus, In both partyline examples, Hall does not disclose applying a ringing signal to less than all of the telephones on a party line at a time.

Because Pickett in view of Hall does not disclose at these limitations of claim 1, claim 1 is asserted to be allowable.

B. Claim 2

Claim 2 is not taught, disclosed or suggested by Pickett in view of Hall and Alderman.

Claim 2 recites generating an indicator light signal in response to the primary voltage, wherein a peak voltage of the indicator light signal is provided to no more than approximately a half of the maximum number of telephones at a time.

As discussed above, Alderman is the only reference that relates to a indicator light. As noted, Alderman merely states that the power available to flash a flashing light on a telephone may limit the flashing frequency. Alderman makes no mention about how to overcome this limitation. In contrast, as discussed above, claim 2 is directed to such a solution by reciting that the indicator light signal is provided to a limited number of telephones at one time.

Because Alderman does not disclose or even contemplate a solution to the problem, the limitations of claim 2 are asserted to be allowable.

C. Claims 2 and 4-7

Claims 2 and 4-7, which depend from claim 1, are asserted in a condition for allowance, for at least the reasons discussed in relation to claim 1, and more specifically, for the specific limitations they recite. The Examiner is invited to closely review the additional limitations.

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D. Claims 9 and 18

Claims 9 and 18 are asserted in a condition for allowance, for substantially the same reasons discussed in relation to claim 1, and more specifically, for the specific limitations they recite. The Examiner is invited to closely review the additional limitations.

E. Claims 10, 11, 15 and 17

Claims 10, 11, 15 and 17 which depend from claim 9, are asserted in a condition for allowance, for at least the reasons discussed in relation to claim 9, and more specifically, for the specific limitations they recite. The Examiner is invited to closely review the additional limitations.

F. Claims 19, 20, 22-23, 25 and 27-28

Claims 19, 20, 22-23, 25 and 27-28 which depend from claim 18, are asserted in a condition for allowance, for at least the reasons discussed in relation to claim 18, and more specifically, for the specific limitations they recite. The Examiner is invited to closely review the additional limitations.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

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If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 326-2400.

Respectfully submitted,



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